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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09-788,334	02/16/2001	Thomas B. Carlson	DEKA 282US MBW	6107

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EXAMINER

MEHTA, ASHWIN D

ART UNIT PAPER NUMBER

1638

DATE MAILED: 09/25/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/788,334

Applicant(s)

CARLSON, THOMAS B.

Examiner

Ashwin Mehta

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 29 March 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other

DETAILED ACTION

Specification

1. The specification is objected to for the presence of blank lines on page 5, line 13; page 10, line 23; and page 22, line 18; page 29, lines 10 and 11.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 3, 4, 14, and 21-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 3 and 4: the claims are indefinite because they broaden the scope of the claim from which it depends. Claim 2 is specifically drawn towards a population of seed of corn variety I015011. Claim 2 does not make any mention of any other seed variety being part of the population. However, claim 3 encompasses essentially homogeneous populations of I015011 seed, which can comprise other types of corn seed. Similarly, the population of claim 4 can contain hybrid corn.

In claim 14: the recitation "An essentially homogeneous population of corn plants produced by growing the seed of the corn variety I015011" in lines 1-2 renders the claim indefinite. The I015011 seed can only produce I015011 plants. The population can therefore only consist of I015011 plants. It is then not clear why the population is referred to as

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"essentially homogeneous," since such populations can be comprised of more than one type of plant.

In claims 21 and 22: the claims are indefinite because they do not clearly indicate how many crosses are to be performed in the process. It is suggested that that recitation --F1-- be inserted in claim 21, line 1, before "seed", and in claim 22, line 1, before "hybrid".

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 3, 4, 14, and 24-31 rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The claims are broadly drawn towards an essentially homogeneous population of seed of corn variety I015011, or a population of I015011 seed essentially free of hybrid seed; an essentially homogeneous population of corn plants produced by growing seed of I015011; any hybrid corn seed produced by crossing corn plant I015011 with any second, distinct inbred corn plant; any hybrid corn plant produced by growing said hybrid seed; inbred corn plant I015011 further comprising any single locus conversion; a method of producing inbred corn plant derived from corn variety I015011 comprising crossing I015011 plants with any second corn plant, and crossing the progeny with itself or any other plant to produce further progeny.

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The specification describes numerous morphological and physiological characteristics of corn plant I015011 (page 24, line 1 to page 29, line 5). The specification also indicates that essentially homogeneous populations of inbred seed are those in which the inbred seed forms about 90% to about 100% of the total seed (page 5, lines 15-19). However, in those populations where I015011 seed forms less than 100% of the population, the identity of the remaining seed is unknown, yet the claims encompass all the individuals of the population. The specification does not describe the non-I015011 seed of the claimed essentially homogenous populations, or the hybrids of the populations that are "essentially free" of them. The specification also does not describe any hybrid corn plants produced by crossing I015011 with any other inbred corn plant, except for a hybrid designated "6017147" (page 56, line 1 to page 57, line 5). The descriptions of I015011 and 6017147, however, do not provide any information concerning the description of all other hybrids. The description of I015011 is also not indicative of any transgenic plant or I015011 plants comprising single gene conversion(s). Further, transgenes may be of any gene, including those that affect more than one trait. The morphological and physiological characteristics of any such plant are not described. A transgene that is a transcription factor, for example, can effect more than just one gene, and multiple traits. Such plants would express different morphological and physiological traits from I015011, which are not described. For claim 27, it is suggested that the types of transgenes contemplated in the specification be listed, provided the prior art teaches those isolated genes. For example, the specification does not describe any gene that confers enhanced yield stability. Given the breadth of the claims encompassing essentially homogeneous populations of I015011 seeds and plants, hybrid corn plants expressing any traits and I015011 further comprising any single locus conversion, and

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lack of guidance of the specification as discussed above, the specification fails to provide an adequate written description of the multitude of corn plants and their parts encompassed by the claims.

4. Claims 1-31 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Since the claimed seed of corn inbred line I015011 is essential to the claimed invention, it must be obtainable by a repeatable method set forth in the specification or otherwise be readily available to the public. If the seed is not so obtainable or available, a deposit thereof may satisfy the requirements of 35 U.S.C. 112. The specification does not disclose a repeatable process to obtain the exact same seed in each occurrence. It is acknowledged that Applicants, in the preliminary amendment received 29 March 2002, amended the claims by inserting the ATCC accession number under which I015011 seed have been deposited, and that page 29 indicates that the deposit will be made in accordance with the terms of the Budapest Treaty. However, if the seeds are deposited under the terms of the Budapest Treaty, then an affidavit or declaration by the applicants, or a statement by an attorney of record over his or her signature and registration number, must also be submitted, stating that the seeds will be irrevocably and without restriction or condition released to the public upon the issuance of a patent. A minimum deposit of 2500 seeds is considered sufficient in the ordinary case to assure availability through the period for which a deposit must be maintained. See 37 CFR 1.801-1.809.

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Applicants are also reminded to amend the specification by inserting the ATCC deposit number in pages 5, 10, 22, and 29.

If the deposit has not be made under the Budapest Treaty, then in order to certify that the deposit meets the criteria set forth in 37 CFR 1.801-1.809, Applicants may provide assurance of compliance by an affidavit or declaration, or by a statement by an attorney of record over his or her signature and registration number showing that

(a) during the pendency of the application, access to the invention will be afforded to the Commissioner upon request;

(b) all restrictions upon availability to the public will be irrevocably removed upon granting of the patent;

(c) the deposit will be maintained in a public depository for a period of 30 years or 5 years after the last request or for the enforceable life of the patent, whichever is longer;

(d) the viability of the biological material at the time of deposit will be tested (see 37 CFR 1.807); and

(e) the deposit will be replaced if it should ever become inviable.

5. Claims 1-31 are rejected.

Contact Information

Any inquiry concerning this communication from the examiner should be directed to Ashwin Mehta, whose telephone number is 703-306-4540. The examiner can normally be reached on Mondays-Thursdays and alternate Fridays from 8:00 A.M to 5:30 P.M. If attempts to

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reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amy Nelson, can be reached at 703-306-3218. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3014 and 703-872-9306 for regular communications and 703-872-9307 for After Final communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.


ASHWIN D. MEHTA, PH.D
PATENT EXAMINER

September 24, 2002